ABSTRACT OF THE INVENTION

A computer implemented method for creating a balanced binary tree is provided, in which a list of elements is successively divided into left side and right side groupings. The median of each left side grouping is placed in the tree as a descendent node of the previous median until the list can no longer be divided. The method then involves walking back up the tree to find right-side medians and inserting them as right side descendent nodes into the binary tree. Whenever there is a choice between breaking down a left side grouping and breaking down a right side grouping, the left side grouping takes priority. The method may also be implemented so that right side groupings take priority.